CLAIMS OBJECTIONS

The objection to the typographical error "only f if" has been made in conformance with the Office's request.

The full spelling out of the phrase "Signal-to-Interference-and-Noise-Ratio (SINR)" for just the acronym "SINR" alone, in Claim 3 where it first appears (and not in Claim 2 as the Office Action identified it) has been made in conformance with the Office's request.

The parentheses in Claim 32 have been removed, in conformance with the Office's request.

The second of the two claims labelled "Claim 34" has been cancelled. The text of the second "Claim 34" has been introduced as the new claim 188. It is believed that this correction is in conformance with the Office's request.

The misspelling of the word "heterogeneous" in Claim 38 has been corrected, in conformance with the Office's request.

The second occurrence of the repeated line "A wireless electronic communications network" has been removed from Claim 101, in conformance with the Office's request.

The typographical error in Claim 185 has been corrected, replacing the comma following the word "comprising" with the correct punctuation mark of a colon, in conformance with the Office's request.

Accordingly, it is believed that these objections have been traversed and that the claims are now all in presently allowable, correct, and proper form.

CLAIMS REJECTIONS - 35 USC ¶112

To assist the swift evaluation by the PTO of this Response, it will identify the specific paragraphs of the First Office Action by a paragraph mark, so ¶18 is a reference to Paragraph 18 of the First Office Action.

All of the specific rejections under 35 USC §112, in paragraphs 18 through 22 (¶¶18-22) of the First Office Action were conceded as being resolved with the claim language, as currently amended.

¶19: The phrases "diversity capacity" and "diversity capacity means" were eliminated earlier as a part of the prosecution effort, thereby resolving the concern indicated in ¶19.

The parsing of the phrase "diversity capability means capacity" separates the first three words "diversity capability means" into a first unifying group noun phrase, then links that with the fourth word "capacity" to form a second, more tightly described group noun phrase, describing a capacity measured by the diversity capability means belonging to or existing in X; with X being in 40 "any intermediate subset of nodes" and in Claim 110 the "network".

The use of the word "may" in each of Claims 13, 14, and 15 states a specific permission, but not requirement, as opposed to a tacit ban on the negative, and thereby was not stating a preference but distinguishing the dependent from independent claim.

The changes to the step of "linking..." in Claim 1, eliminating the preference/criteria issue, resolved the concerns for Claims 23, 24, and 25.

The grammatical linkage of the two gerunds, "incorporating" and "including" in the claim language make the antecedent for the word "said" after the second gerund the noun clause immediately following the first gerund, that is, "network control and feedback aspects". If any question remains an Examiner's Amendment to Claim 27 that replaces the words "including said" with the phrase "including the network control and feedback

aspects" is approved in advance.

In Claim 115 the objected-to term "a dynamics-resistant multitone element" is one commonly known to and used by those skilled in the art and thus was not further defined.

11 of Claim 1 (in the current claims listing) was not raised during the telephonic interview. The phrase "spatially diverse antennae array" is used in the other independent claims and appears within Claim 1's text lower down. To correct the lack of antecedent, the text "a spatially diverse antennae array" replaces "an antennae array" in line 9 of Claim 1 in the current claims listing, bringing the text into conformity with the phraseology used in the other independent claims and subtext, and correcting this lack of antecedent basis.

The second sub-paragraph of \$\mathbb{I}20\$ cuts off after the word "subdividing" and is uncomprehensible. However, it is believed that this has been addressed above with the elimination of the preference/criteria issue.

¶21: The objection to the apparent 'means clause' in this paragraph was resolved during the telephonic interview.

¶22: The objections to claims 116-179, 182 and 183 did not grant proper credit either to the fact that the independent method claim sets forth with specificity the steps involved in the process and is incorporated in its dependent claims, or to the fact that the core law (35 USC §271) prohibits any use of a patented apparatus. Applicant's attorney asked during the telephonic interview whether these claims had to be cancelled and was not advised that this was necessary.

Accordingly, it is believed that these rejections have been traversed and that the claims are now all in presently allowable, correct, and proper form.

CLAIMS REJECTIONS - 35 USC §102 and §103

The majority of the telephonic interviews with each of the Examiner and the Examiner's supervisor were devoted to resolving the issues raised in the objections depending on the prior art, that is, objections under both §102 and §103. The principle independent claims were specifically amended to meet, and thus traverse, these objections, and were cooperatively drafted, with the applicant's Attorney inquiring as to necessitated changes, suggesting specific language, listening to and discussing the PTO's concerns and observations, and revising the suggested language to meet these, in an intense, productive, and mutually respectful and cooperative atmosphere.

The PTO admitted that other specifics, particularly as to the nodes, not addressed in the Office Action but present in the objected-to claims, were not in the prior art and might have permitted allowance, but both parties were striving for a common goal of a strong patent that reflected an admitted creative and useful advance in the art.

35 USC §102

¶24: By grouping and requiring both the first criteria, and at least two out of the five remaining criteria, in the sub-steps under the 'linking' step, all prior art objections were overcome as these specifics were nowhere disclosed, suggested, envisioned, or otherwise communicated or even hinted at in the cited reference (Paulraj), or any of the references considered by the Office. TThen, since the independent claims now stood proof against the prior art, the objections to the dependent claims were also dealt with.

Accordingly, it is believed that these rejections have been traversed and that the claims are now all in presently allowable, correct, and proper form.

35 USC ¶103

¶26: By grouping and requiring both the first criteria, and at least two out of the five remaining criteria, in the sub-steps under the 'linking' step, all prior art objections were overcome as these specifics were nowhere disclosed, suggested, envisioned, taught, or otherwise communicated or even hinted at in the principle cited reference (Paulraj), or any of the references considered by the Office that could be combined with the cited reference.

Accordingly, it is believed that these rejections have been traversed and that the claims are now all in presently allowable, correct, and proper form.

CLAIMS ALLOWED

Claims 113 and 114 had been allowed in the Office Action.

As stated earlier, after resolving the fundamental concerns in the independent claims (1, 2, 41, 101, 108, and 185) during the telephonic interview, the PTO indicated that <u>all</u> the claims were presently allowable, correct, and proper form.

FURTHER TYPOGRAPHICAL CORRECTIONS

In the process of reviewing the Claims and preparing this response, the following additional typographic errors were identified and corrected by the attorney for Applicant.

In Claim 41, the lack of a missing space between two words was noticed, and "diversity capability" was replaced with "diversity capability".

In Claim 59, the repetition of the word "wherein" was eliminated.

In Claim 72, the lack of a missing space between two words was noticed, and "Amethod" was replaced with "A method".

In Claim 109, the misspelling was corrected, with "futher" being replaced by "further".

In each of Claim 150 and Claim 151, the misspelling of "reliability" was corrected with "reliability", and the presence of an extra period after the sentence was removed.

By correcting these, and the typographic and other minor errors in a few of the dependent claims identified in the Office Action (Claims 3, 19, 20, 32, 38), and by cancelling a duplicated "Claim 34" and adding a new Claim 188 with the identical text (rather than renumbering every claim between 34 and 187), and by making one change (in independent Claim 1, to correct the lack of antecedent basis identified in the Office Action but not mentioned during the telephonic interview), this submission is respectfully intended to support and strengthen the PTO's determination and fully enable a Notice of Allowance and a final patent to issue on Applicant's invention.

If the Examiner has any questions or wishes to discuss this matter she is urged to contact the Applicant's attorney, George S. Cole, Esq., using the phone, fax, or email below.

A claims listing with the status of each claim, with the claims in ascending order, and with the text of the claim, has been appended to this Response. This listing of claims will replace all prior versions, and listings, of claims in the application.

The Applicant believes that these claims are now all in presently allowable, correct, and proper form, and respectfully asks that a timely Notice of Allowance be issued in this case. If any issue should arise the PTO is asked to immediately telephone, to minimize the effort needed on its part.

Respectfully Submitted:

george S. Cole, Esq.

PTO #40.563

495 Seaport Court, Suite 101 Redwood City, CA 94063

Tel: (650) 322-7760 Fax:(650) 322-6117 GSCdLawyer@aol.com